

prescribed significantly higher number of drugs compared to those without diabetes and age ≤ 50 years. The top three prescribed medication groups were antianemic preparations (B03), minerals (A12) and vitamins (A11). Vitamin D analogues were prescribed to 31.3% of the patients. The predominantly prescribed vitamin D analogue was calcitriol. Around 91% of the patients were prescribed phosphate binders (PB). Calcium carbonate (88.8%) was the most commonly prescribed phosphate binder, whereas sevelamer and lanthanum were seldom prescribed. None of the patients was prescribed calcium acetate and aluminum-based PB. **CONCLUSIONS:** Patients with CKD stage 5D are prescribed higher number and variety of drugs for the management of comorbidities associated with kidney disease. Although non-calcium/non-aluminum based PB have less side effects as compared to calcium-based PB, they are seldom prescribed.

PUK6

PREVALENCE OF CHRONIC KIDNEY DISEASE IN INDIA: A SYSTEMATIC REVIEW AND META-ANALYSIS OF OBSERVATIONAL STUDIES

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OBJECTIVES: Chronic kidney disease (CKD) is one of the most commonly occurring non-communicable diseases in India. CKD is associated with significant morbidity, mortality and economic burden in India. The objective of the present study is to estimate the prevalence of CKD in India. **METHODS:** A systemic search of published literature was carried out using PubMed, Elsevier ScienceDirect, Cochrane library databases and Google scholar (from 1990 to April 2015) by two independent reviewers. Reference list of the related articles was also screened to find out the relevant studies. CKD definition of KDIGO guideline was used for inclusion criteria. Cochrane Q-statistics test and I² statistics were used to assess the heterogeneity. Random effect model was used. Comprehensive Meta-Analysis software (Version 2.2, Biostat, Englewood NJ) was used. **RESULTS:** Five studies were selected as per inclusion criteria. These studies covered the different geographical regions in India. The numbers of participants ranged from 2091 to 5588. Pooled rate estimates suggest that 56.11% (95% CI, 48.46–63.75) of the patients were male. Hypertension and diabetes were found to be the most common comorbidities according to overall pooled estimates [48.67 (95% CI, 19.30–78.05) and 17.39 (95% CI, 6.67–28.12), respectively]. Modification of Diet in Renal Disease (MDRD) formula for GFR calculation was used by all studies. According to MDRD, CKD pooled prevalence in people over 18 years was found to be 2.97% (95% confidence interval [CI], 1.38%–4.56%). However, Chronic Kidney Disease Epidemiology Collaboration (CKD-EPI) formula was used by two studies and pooled prevalence found to be 3.51%. Overall prevalence of end stage renal disease (ESRD) was 0.27% (95% CI, 0.06%–0.48%). Pooled estimate for the prevalence of proteinuria was 6.98% (95% CI, 2.04%–11.91%). **CONCLUSIONS:** The prevalence of CKD, according to MDRD and CKD-EPI was 3% and 4%, respectively. Hypertension was found to be most commonly occurring co-morbidity (49%). About 7% of the Indian patients were found to have proteinuria.

URINARY/KIDNEY DISORDERS – Cost Studies

PUK7

INTRODUCTION OF MIRABEGRON IN THE CZECH REPUBLIC FROM PAYER'S PERSPECTIVE – 1 YEAR OVERVIEW

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OBJECTIVES: Our goal was to analyze the rising utilization and to provide a comparison between expected number of patients and expenditures described in the submitted budget impact analysis and the real expenditures of mirabegron for treatment of overactive bladder since its introduction in the Czech Republic in January 2014. **METHODS:** The data source for our analysis was the business activity monitoring database of the General Health Insurance Company of the Czech Republic (VZP CR). VZP CR covers approximately 60 % of marketshare in the Czech Republic. Patient was defined as an insured person with a recorded prescription for mirabegron (G04BD12) during the observed period 01-12/2014. We identified the number of patients treated with mirabegron in the observed period and determined the real expenditures. We compared the real data with submitted BIA predictions. **RESULTS:** Since the introduction of mirabegron in January 2014 its utilization rose to 1.870 million DDD till 12/2014. There were 11 437 patients treated with mirabegron and the real expenditures of VZP CR representing 60% were €2.6 million (1EUR=27,24CZK) in 2014, which strongly differed from the predicted number of patients (2026) and expenditures (€672t-€1.mil) presented in the base case budget impact analysis in the reimbursement decision published by State Institute of Drug Control (SUKL). **CONCLUSIONS:** There was a significant difference between expenditures predicted in the submitted budget impact analysis and real expenditures. The real expenditures were almost 4 times higher than the base case predictions (2,5x higher when calculated with cost per patient estimation by SUKL) and more than 30% higher than the upper predictions for the first year. Expenditures in the first quarter 2015 (€1,5 million) have already reached the predictions for the whole 2015 according to the base case. Further analysis will follow to confirm this trend.

PUK8

ECONOMIC BURDEN OF ADPKD FROM THE SPANISH HEALTH SYSTEM AND PATIENT'S PERSPECTIVE: ADVANTAGES OF DELAYING DIALYSIS

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OBJECTIVES: Autosomal Dominant Polycystic Kidney Disease (ADPKD) imposes a significant economic burden on healthcare systems, particularly in advanced stages (5 or End Stage Renal Disease, ESRD). The aim of this model is to study the usual

cost of each stage of kidney disease according scheduled visits in each condition, and, therefore, to calculate the economic burden of one year dialysis for the Spanish Health System, to check the advantage of a treatment that could delay the disease progression of ADPKD. **METHODS:** The model was based in normal practice of a specific hospital, selected for its expertise within ADPKD. To build the model the following figures were provided: Hospital costs (number of expected healthcare provider visits, analytics, image diagnosis), and other expected costs (such ambulance transport and concomitant treatments for hypertension, hypercholesterolemia, hyperuricemia, pain, infections, and haematuria). In addition to this, costs from the patient's perspective, namely medication and transport costs were also analysed. **RESULTS:** The annual cost for dialysis patients in Hospital La Paz, and Madrid Province, in general, is 56,028 euros (43,980.00 € for Hospital costs, up to 600 € for medication, and 11,448 € for ambulance transport), while the rest of Chronic Kidney Disease stages (CKD stages 1-4) range annually between 809-1.551 € (Hospital costs and medication). Therefore, avoiding 1 year of dialysis will represent around 54,800 € savings. ADPKD patients cover additional expenses (up to 350 € for medication and 8-195 € for transport, annually). **CONCLUSIONS:** Dialysis extensively increases the economic burden of ADPKD, this is mainly seen in the healthcare system. ADPKD patients are faced with medication costs and travel expenses, as well as other incommensurables and non-calculated indirect costs. Therefore, a treatment able to delay the disease progression represents an important step towards patient wellbeing and big savings for the Health System

PUK9

DO SOCIOECONOMIC INEQUALITIES IMPACT THE SOCIAL COST OF CHRONIC KIDNEY DISEASE IN ITALY?

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OBJECTIVES: The cross sectional study aims to estimate the impact of socio-economic determinants, such as education and employment status, on the social cost of a patient with chronic kidney disease (CKD) stage IV and V pre-dialyses in Italy. **METHODS:** Individual socio-economic and clinical data have been collected for all adult outpatients in charge of 14 main Hospitals Centers in Tuscany Region during 7 weeks between 2012 and 2013. Direct medical costs have been estimated using tariff for laboratory test, diagnostic exams, visits and hospitalization and price for drugs. The cost of diet, patients and caregivers travel expenses, formal and informal care have been evaluated as direct non medical costs. The human capital approach has been used for estimating the loss of productivity of patients and caregivers. The incremental effects of socio-economic determinants on social cost of CKD were estimated by multivariate Generalized Linear Models (log link, Gamma family) adjusting for gender, age and stage of disease. **RESULTS:** No qualification and low levels of educations and non-working status characterized, respectively, the 54% and 89% of 484 patients enrolled. The raw estimated mean annual social costs were €9,855 (± €6,826) per patient with CKD. Direct medical costs amounted to €4,352 (± €4,071), representing the 44% of the overall cost, while direct non medical costs and indirect costs accounted for 30% and 26% (€2,912 ± €3,823 and €2,590 ± €3,210). The incremental effect of non-working status on direct medical cost was €1,321 (95% CI: 121-2,520, p<0,05). Employment condition and high levels of education had an incremental effect on indirect costs of €2,616 (95% CI: 391-4,841, p<0,05) and €1,039 (95% CI: 135-1,943, p<0,05). **CONCLUSIONS:** Socio-economic inequalities lead to a significant increase of direct medical cost of CKD. High education and employment status of patients significantly increase the indirect cost component of CKD social cost.

PUK10

COSTS OF OVERACTIVE BLADDER SYMPTOMS TREATMENT WITH SOLIFENACIN

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BACKGROUND: Overactive bladder (OAB) symptoms still are not treated in Russian Federation in most cases though several medicines are available at the pharmaceutical market. Direct and indirect costs associated with treatment are important for decision makers in health care. **OBJECTIVES:** To conduct cost analysis of solifenacin for OAB symptoms vs absence of pharmacotherapy from the Russian government perspective. **METHODS:** A mathematical model was constructed to calculate direct and indirect costs associated with OAB for 1 year. Direct medical costs included OAB treatment with solifenacin when relevant, urine pads, treatment of complications and concomitant conditions (CCC) such as urinary infections, skin rash, depression and fractures. Indirect costs included productivity losses in patients of working ages. Data on incidence of CCC for solifenacin treatment and no treatment strategies was derived from clinical studies. One-way sensitivity analysis was performed. **RESULTS:** Direct medical costs are higher for solifenacin strategy vs no treatment: €567 and €483 respectively with cost difference of €84 per patient per year. But solifenacin appears to be cost saving strategy vs no treatment when total costs are taken into account: cost difference is €40 per patient per year in favor of solifenacin. Solifenacin remains cost-saving option until the cost of urinary pads decreases twice from baseline or the solifenacin efficacy becomes less for 15% from baseline. **CONCLUSIONS:** Solifenacin seems to be an acceptable option for Russian healthcare from the government perspective.

PUK11

COST-CONSEQUENCES ANALYSIS OF FESOTERODINE AT FLEXIBLE-DOSE IN THE THERAPY OF OVERACTIVE BLADDER IN ROUTINE MEDICAL PRACTICE

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